

WHAT IS CLAIMED IS:

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1. A photoelectric conversion apparatus comprising:

5 a sensor array for receiving reflected light from an object;

first transfer means for transferring a signal from said sensor array; and

ring-shaped second transfer means for integrating the signal from said first transfer means,

10 wherein said first charge transfer means transfers a first signal from said sensor array in a light projection ON state and a second signal from said sensor array in a light projection OFF state at a predetermined timing, and a transfer frequency of said
15 second transfer means is higher than that of said first transfer means.

2. An apparatus according to claim 1, wherein the predetermined timing of said first transfer means
20 has a phase different from that of said second transfer means.

3. An apparatus according to claim 1, wherein said second transfer means comprises skimming means for
25 determining skimming on the basis of the second signal, and a pixel for which skimming is determined performs

skimming by a combination of light projection ON and OFF states.

4. An apparatus according to claim 1, wherein the first and second signals are transferred alternately, and a light projection OFF pixel goes ahead.

5. An apparatus according to claim 1, wherein integration starts from the first signal.

6. An apparatus according to claim 1, wherein light projection repeatedly alternates the ON and OFF states.

7. An apparatus according to claim 5, wherein skimming is inhibited when a light projection OFF signal goes ahead of a light projection ON signal in integration of the signal in said second transfer means.

8. A distance measuring apparatus comprising:
light projection means for projecting light to an object;

a plurality of sensor arrays for receiving reflected light from the object;

a plurality of first transfer means for transferring signals from said plurality of sensor arrays, respectively;

5 a plurality of second transfer means for integrating the signals from said plurality of first transfer means, respectively, wherein each of said first transfer means transfers a first signal from said sensor array in a light projection ON state and a second signal from said sensor array in a light
10 projection OFF state at a predetermined timing, and a transfer frequency of each of said second transfer means is higher than that of each of said first transfer means; and

distance measuring means for measuring a distance
15 using a difference signal between the first signal and the second signal output from said plurality of second transfer means.

9. An apparatus according to claim 8, wherein
20 the predetermined timing of said first transfer means has a phase different from that of said second transfer means.

10. A photoelectric conversion apparatus
25 comprising:

a sensor array for receiving reflected light from an object;

first transfer means for transferring a signal from said sensor array;

ring-shaped second transfer means for integrating the signal from said first transfer means; and

5 driving means for controlling to transfer a first signal from said sensor array in a light projection ON state and a second signal from said sensor array in a light projection OFF state to said second transfer means through said first transfer means,

10 wherein after the first signal is transferred from said first transfer means, said driving means transfers the second signal to said first transfer means.

11. An apparatus according to claim 10, wherein a
15 transfer frequency of said second transfer means is higher than that of said first transfer means.

12. An apparatus according to claim 10, wherein
20 said second transfer means integrates the signal in the light projection ON state and the signal in the light projection OFF state, and stops integration when a difference signal between the integrated signal in the light projection ON state and that in the light
25 projection OFF state has a value not less than a predetermined value.

13. A distance measuring apparatus comprising:

a plurality of sensor arrays for receiving reflected light from an object;

5 a plurality of first transfer means for transferring signals from said plurality of sensor arrays, respectively;

a plurality of ring-shaped second transfer means for integrating the signals from said plurality of first transfer means, respectively;

10 driving means for controlling to transfer a first signal from said sensor array in a light projection ON state and a second signal from said sensor array in a light projection OFF state to said second transfer means through said first transfer means; and

15 distance measuring means for measuring a distance using a difference signal between the first signal and the second signal output from said plurality of second transfer means,

20 wherein after the first signal is transferred from said first transfer means, said driving means transfers the second signal to said first transfer means.